MITSUBISHI

THE BIG SCREEN COMPANY™

Digital

Owner's Guide

Projection Television Models
WT-46807, WS-55807, and WS-65807

Platinum Series

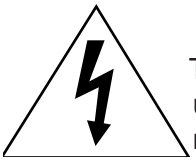
visit our website at

www.mitsubishi-tv.com

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning: To avoid permanently imprinting a fixed image onto your TV screen, please do not display the same stationary images on the screen for more that 15% of your total TV viewing in one week. Examples of stationary images are letterbox top/bottom bars from DVD disk or other video sources, side bars when showing standard TV pictures on widescreen TV’s, stock market reports, video game patterns, station logos, web sites or stationary computer images. Such patterns can unevenly age the picture tubes causing permanent damage to the TV. Please see page 61 for a detailed explanation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Mitsubishi could void the user’s authority to operate this equipment.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:
TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

NOTE TO CATV SYSTEM INSTALLER:
THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER’S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR THE PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

IMPORTANT SAFEGUARDS 4-5

THANK YOU

Thank You Letter 8
Unpacking Your New TV 9
Special Features 9

INSTALLATION

Front Control Panel Functions 12
Back Panel Functions 13
How Connections Affect:
- PIP and POP 14
- Home Theater IR System 14

Connecting to Your New Mitsubishi Bigscreen:
- Antenna or Wall Outlet Cable 16
- Cable Box 16
- VCR 17
- Audio Receiver 18
- DVD Player or any S-Video Device 19
- DTV Receiver 20
- Active A/V Network 22
- Home Theater IR System 22

IMPORTANT NOTES 23

SETUP

Use of the Remote Control with Other A/V Products 27
ViewPoint® on-screen menu system 28
Using ViewPoint® 28
- Menu Screens (Overview) 29-30
- Setup Menu 31
  - Memorize Channels 31
  - Input Assignment 31
  - A/V Connection 32
  - Language 34
  - Clock Setting 35
- Captions Menu 37
- Channel Edit Menu 39
- V-Chip Lock 42-44
- Advanced Features Menu 45
  - Timer 45-46
  - Convergence 47
- Audio Video Settings Menu 49

OPERATION

Remote Control Functions 54-61
- Overview 54
- Care and Operation 55
- Channel Selection 56
- Sleep Timer 56
- Active A/V Network 56
- Home Theater IR System 57
- Special Functions 58
- Operation of PIP and POP 58-59
- Display Formats 60

IMPORTANT NOTES 62

Appendix A: Bypassing the V-Chip Lock 63
Appendix B: High Definition Inputs Connection Compatibility 65
Appendix C: Remote Control Programing Codes 66
Appendix D: Cleaning and Service 67
Appendix E: Troubleshooting 68
Index 69-70
Mitsubishi Projection TV Limited Warranty 71

IMPORTANT SAFEGUARDS

Please read the following safeguards for your TV and retain for future reference.

Always follow all warnings and instructions marked on the television.

1. Read, Retain and Follow All Instructions

Read all safety and operating instructions before operating the TV. Retain the safety and operating instructions for future reference. Follow all operating and use instructions.

2. Heed Warnings

Adhere to all warnings on the appliance and in the operating instructions.

3. Cleaning

Unplug the TV from the wall outlet before cleaning. Do not use liquid, abrasive, or aerosol cleaners. Cleaners can permanently damage the cabinet and screen. Use a lightly dampened cloth for cleaning.

4. Attachments and Equipment

Never add any attachments and/or equipment without approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

5. Water and Moisture

Do not use the TV where contact with or immersion in water is possible. Do not use near bath tubs, wash bowls, kitchen sinks, laundry tubs, swimming pools, etc.

6. Accessories

Do not place the TV on an unstable cart, stand, tripod, or table. The TV may fall, causing serious injury to a child or adult and serious damage to the TV. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the TV. Any mounting of the TV should follow the manufacturer's instructions, and should use mounting accessories recommended by the manufacturer.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the TV and to protect it from overheating. Do not block these openings or allow them to be obstructed by placing the TV on a bed, sofa, rug, or other similar surface. Nor should it be placed over a radiator or heat register. If the TV is to be placed in a rack or bookcase, ensure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.

8. Power Source

This TV should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.

9. Grounding or Polarization

This TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

10. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the TV.

11. Lightning

For added protection for this TV during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power-line surges.

IMPORTANT SAFEGUARDS Continued

12. Power Lines
An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

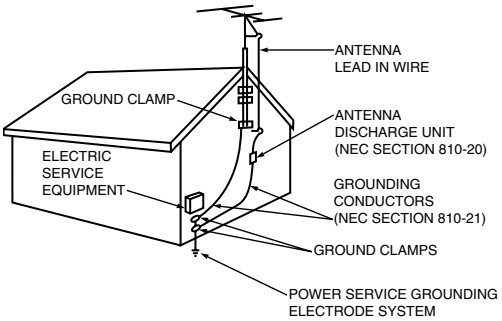
13. Overloading
Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

14. Object and Liquid Entry
Never push objects of any kind into this TV through openings as they may touch dangerous voltage points or short-out parts that could result in fire or electric shock. Never spill liquid of any kind on or into the TV.

15. Outdoor Antenna Grounding
If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)

NEC — NATIONAL ELECTRICAL CODE

16. Servicing
Do not attempt to service this TV yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

17. Damage Requiring Service
Unplug the TV from the wall outlet and refer servicing to qualified service personnel under the following conditions:

(a) When the power-supply cord or plug is damaged.
(b) If liquid has been spilled, or objects have fallen into the TV.
(c) If the TV has been exposed to rain or water.
(d) If the TV does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to its normal operation.
(e) If the TV has been dropped or the cabinet has been damaged.
(f) When the TV exhibits a distinct change in performance - this indicates a need for service.

18. Replacement Parts
When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

19. Safety Check
Upon completion of any service or repair to the TV, ask the service technician to perform safety checks to determine that the TV is in safe operating condition.

20. Heat
The product should be situated away from heat sources such as ratiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

If you have questions regarding your television, call
Consumer Relations
at (800) 332-2119, or email us at
MDEAservice@bigscreen.mea.com

To order replacement or additional remote controls or owner's guides
call (800) 553-7278

or

visit our website at www.Mitsubishi-TV.com

Part I

Thank You

Thank You Letter 8

Unpacking Your New TV 9

Special Features 9

We at Mitsubishi Would Like to Thank You

To the Mitsubishi Consumer:

Thank you for choosing Mitsubishi as your premier home entertainment partner. Whether this is your first Mitsubishi consumer electronics product or an addition to your growing Mitsubishi family, you should be proud and delighted for choosing one of the most technologically advanced big-screens available today.

We consider it an honor to provide you with the highest quality products possible. We have been called "obsessed with quality," and "unwavering in our pursuit of tomorrow's advances." These are titles we carry with pride on every Mitsubishi bigscreen that moves from our hands to your home.

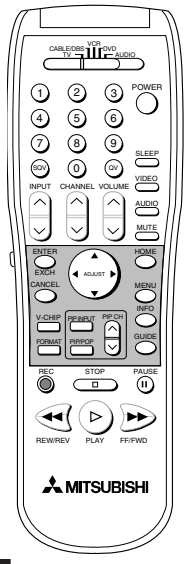
When you look at your new Mitsubishi bigscreen television, please see all of us who built it, because when we build it, we see you.

Thank You Again,
The Mitsubishi Team

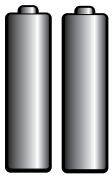
Unpacking Your New TV

Please take a moment to review the following list of items to ensure that you have received everything included:

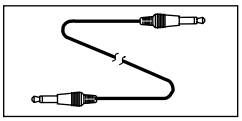
1. Remote Control
2. (2) AAA Batteries
3. Active A/V Network Cable
4. IR Emitter Cable
5. Product Registration Card
- Owner's Guide



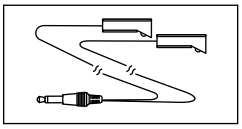
1 *Remote Control*



2 *(2) AAA Batteries*



3 *Active A/V Network Cable*



4 *IR Emitter Cable*

5 *Product Registration Card*

Special Features

Your new HDTV Upgradeable bigscreen television has many special features that make it the perfect addition to your home entertainment system. Below we have highlighted a handful.

HDTV Upgradeable

With the use of an optional HDTV receiver like the Mitsubishi SR-HD400 or similar model, your Mitsubishi bigscreen can display high definition pictures.
See pages 20 & 21.

Wide Screen Picture Format

You will be able to view pictures as the directors intended you to see them. Both DTV and DVD's supporting the widescreen format will enable you to enjoy a theater feel in the comfort of your home.
See pages 60-61.

PIP/POP Viewing Option

Using Picture-in-Picture and Picture-outside-Picture will give you exciting options for viewing your favorite programs.
See pages 58-59.

V-Chip Technology

Mitsubishi understands that you may want to shield certain viewers from specific program content. Your Mitsubishi bigscreen will allow you to restrict Programming by general contents, specific contents, or even by time.
See pages 42-44.

Multibrand Remote Control

Your Mitsubishi remote control can be programmed to control many other audio/video components.
See page 26 & 27.

Part II

Installation

Front Control Panel Functions 12
Back Panel Functions 13

How Connections Affect:
- PIP and POP 14
- Home Theater IR System 14

Connecting to Your New Mitsubishi Bigscreen:
- Antenna or Wall Outlet Cable ... 16
- Cable Box 16
- VCR 17
- Audio Receiver 18
- DVD Player 19
- DTV Receiver 20
- Active A/V Network 22
- Home Theater IR System 22

IMPORTANT NOTES 23

Front Control Panel

Many remote control buttons are duplicated on the front control panel. These buttons are shaded in figure 1. Please see *Remote Control Functions*, pages 54-61, for an explanation of their usage.

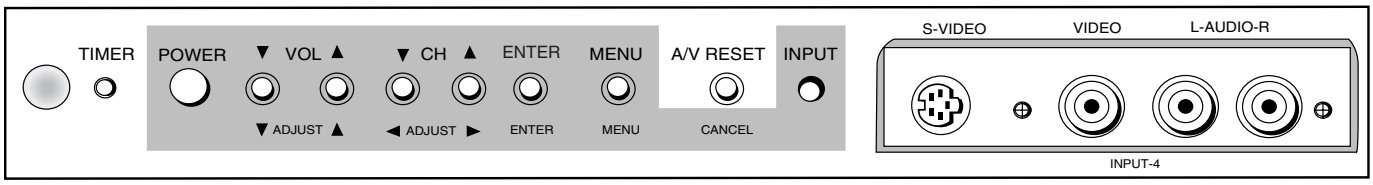


Figure 1. *Buttons can also be used for ADJUST, ENTER, MENU, and CANCEL, while in the menus.*

IRIS™

Intelligent Room Illumination (light) Sensor. Turn this feature on or off using the VIDEO button on your remote control. When the IRIS is on, your TV will automatically adjust picture contrast and brightness for the best picture based on your room lighting. When on, do not block the sensor to ensure an optimum picture.

TIMER

Timer

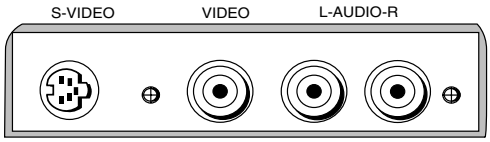
During normal operation, the timer light will glow steady green when the TV is on, and not glow when the TV is off. When the TV is set to turn on at a specific time, the green timer light will blink when the TV is off. Please see *Timer Menu*, pages 45-46, for timer setup instructions.

A/V RESET

CANCEL

A/V Reset

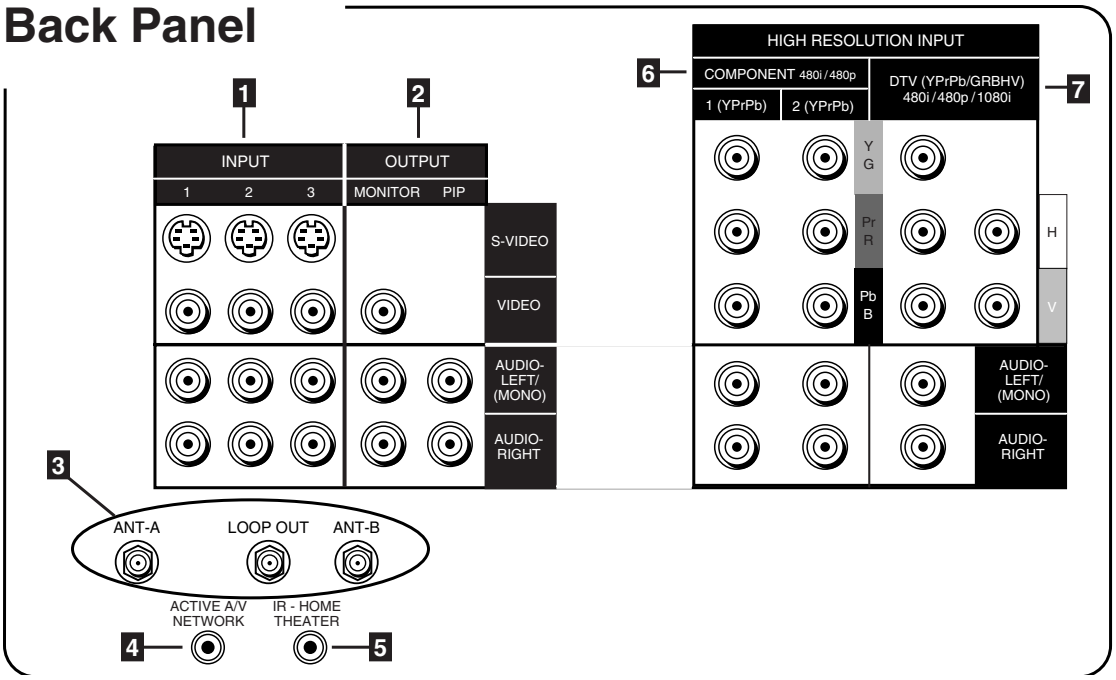
Press this button to reset all nine A/V memory categories to the factory default settings. Please see *Audio/Video Settings Menu*, page 49, for instructions.



Input 4

This input can be used for convenient connection of a camcorder or other video device to the TV. Please note that you may connect to the S-VIDEO or VIDEO terminal, but not to both.

Back Panel



1 Inputs 1-3

These inputs can be used for the connection of a VCR, Super VHS (S-VHS) VCR, laser disc player, or other A/V device to the TV. Please note that with each input, you may connect to the S-VIDEO or VIDEO terminal, but not both.

2 Output (Monitor and PIP)

The Monitor Output sends the TV audio and video signals, excluding component video or DTV, to an A/V receiver or other equipment. The PIP output sends the PIP's or POP's audio signal to an amplifier or wireless headphones. If no PIP or POP is displayed, the PIP output will send the main picture audio signal.

3 Antenna (ANT-A, LOOP OUT, and ANT-B)

ANT-A and ANT-B receive signals from VHF/UHF antennas or a cable system. LOOP OUT sends the ANT-A signal out to another component, such as a cable box or VCR.

4 Active A/V Network

This interface connects Mitsubishi products that have an A/V network terminal.

5 IR Home Theater

Connecting an IR emitter here allows the TV to automatically change a Mitsubishi digital A/V receiver's input in a home theater setup.

6 Component Inputs 1-2

These inputs can be used for the connection of A/V equipment with component video outputs, such as a DVD player. Please see *Appendix B*, page 65, for signal compatibility.

7 DTV Input

This input is used to connect a DTV receiver, and can be configured for HDTV component, RGB, and RGB pluss H&V. Please see *Appendix B*, page 65, for signal compatibility.

How Connections Affect the PIP and POP

To see a picture in the PIP or POP inset, you may need to select an input source. If the only input connected is ANT-A, then both the main picture and the PIP/POP insert will be from that input source. If other video equipment is connected, you may be able to view these input sources as the PIP/POP insert. When connecting your new Mitsubishi bigscreen, it is important to understand which main picture and PIP/POP input sources can and cannot be used together. Table 1 shows which inputs can and cannot be used together and the limitations they may require. To see if DTV 480p, HD or DVD 480p is being displayed as the main picture, press INFO on the TV remote control. The on-screen display, figure 1, will list 480p or HD 16:9 when those signals are being received. See *Operation of PIP and POP*, pages 58-59, for operating instructions. An asterisk (*) displayed after the signal type indicates that the signal being received is a non-standard format. A non-standard format signal may or may not display properly in a PIP/POP inset. See *Operation of PIP and POP*, pages 58-59, for operating instructions.

PIP/POP / MAIN	ANT-A	ANT-B	INPUTS 1-4	COMPONENT INPUTS 1-2	DTV
ANT-A	OK*	NO PIP/POP	OK	OK	OK
ANT-B	OK	OK*	OK	OK	OK
INPUTS 1-4	OK	OK	OK**	OK	OK
COMPONENT INPUTS 1-2	OK	OK	OK	OK**	OK POP NO PIP
DTV	OK	OK	OK	OK	OK**

Table 1. **No Side-by-Side with the same channel. **No Side-by-Side with the same input.*

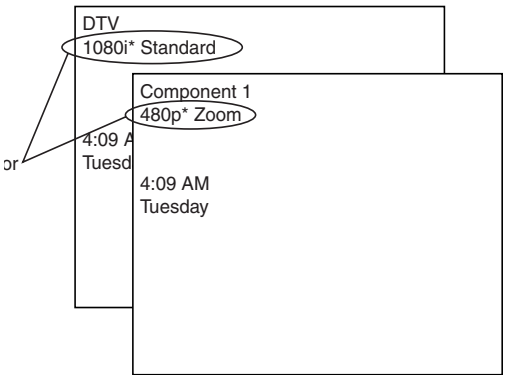


Figure 1. *On-screen display will show 480p or HD 16:9 when those signals are being received.*

How Connections Affect the Home Theater IR System

The Mitsubishi Home Theater IR System Control is a special feature that makes it easier to use your TV with a Mitsubishi digital A/V receiver (M-VR700, M-VR800, M-VR900, or M-VR1000). Once your equipment is properly connected and set up, your TV and Mitsubishi digital A/V receiver will change inputs together, to match high resolution pictures with the proper surround sound.

When you change inputs on your TV to watch different video products, your TV will send signals via the infrared emitter to your Mitsubishi digital A/V receiver and will also change inputs to hear the sound from that product. You will automatically hear the high quality digital surround sound from digital products like your DTV receiver and DVD player, and high quality analog stereo or surround sound from non-digital products like your VCR.

Special Setups: A/V Equipment

VCR: Do not connect the cables to the TV as directed on page 17. Connect the cables to the inputs labeled:

- **VCR 1,** on the digital A/V receiver, models M-VR800 or M-VR1000.
- **VCR,** on digital A/V receiver, models M-VR700 or M-VR900.

DVD: Connect the cables as directed on page 19 (using the COMPONENT-1 input), with one exception. Connect the digital audio output connection on the DVD player to the digital input on the back of the digital A/V receiver.

DTV: Connect the cables as directed on pages 20-21, with one exception. Connect the digital audio output connection on the DTV receiver to a digital input on the back of the digital A/V receiver.

A/V Receiver: Connect as directed on page 18, with two additions. Use a S-Video cable in step 1 if you have a S-Video VCR. The TV outputs should be connected to the A/V receivers input marked TV.

- **Auto Standby:** ON (See your A/V receiver's Owner's Guide for this procedure).
- **Digital Input Assignment for DVD:** Assign the digital input you used for your DVD player to the A/V receiver's DVD input selector. For example, if you connected your DVD player's digital output to the DIGITAL INPUT 1, you need to assign DIGITAL INPUT 1 to the A/V receiver's DVD input, so it will automatically be used. This procedure is explained in your A/V receiver's Owner's Guide.
- **Digital Assignment for DTV:** For Mitsubishi A/V receiver, models M-VR800 or M-VR1000, assign the DTV digital input to VCR 2. VCR 2 will now be used to hear the DTV sound. If you have a Mitsubishi A/V receiver model M-VR700 or M-VR900, assign the DTV digital input to CABLE/DBS. CABLE/DBS will now be used to hear DTV sound.

Infrared Emitter: Connect as shown on page 22.

Special Setups: TV

Menu selection for A/V connections, page 32.

- **TV Speakers:** OFF
- **A/V receiver: Mits A,** if you have Mitsubishi A/V receiver model M-VR800 or M-VR1000.
- **A/V receiver: Mits B,** if you have Mitsubishi A/V receiver model M-VR700 or M-VR900.
- **Audio Output:** Fixed

Remote Control, pages 26-27.

- Set the slide switch to the TV position and follow the programming instructions using the A/V receiver code 010. Always point the remote at the A/V receiver when you wish to adjust the volume or mute the sound.

Connecting an Antenna, Wall Outlet Cable, or Cable Box

Separate UHF and VHF Antennas

(Figure 1)

1. Connect the UHF and VHF antenna leads to the UHF/VHF combiner.
2. Push the combiner onto ANT-A on the TV back panel.

➡ UHF/VHF combiners are not provided with the TV. They should be available at most electronic stores.

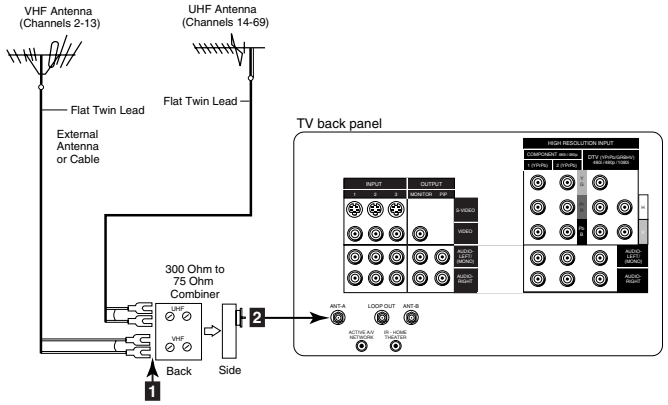


Figure 1. *Connecting separate UHF and VHF antennas.*

Twin Lead Antenna, Coaxial Lead Antenna, or Wall Outlet Cable

For antenna with twin flat leads (Figure 2)

1. Connect the 300ohm twin leads to the transformer.
2. Push the 75ohm side of the transformer onto ANT-A on the TV back panel.

➡ 300ohm to 75ohm matching transformers are not provided with the TV. They should be available at most electronic stores.

For cable or antenna with coaxial lead (Figure 2)

3. Connect the incoming cable to ANT-A on the TV back panel.

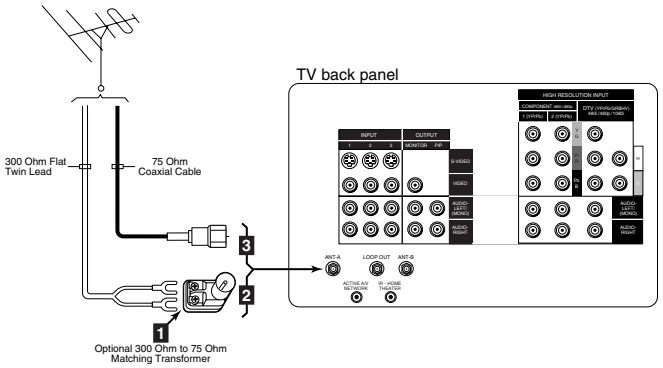


Figure 2. *Connecting twin lead antenna, coaxial lead antenna, or wall outlet cable.*

IMPORTANT

➡ **Additional connection cables are not provided with the TV. They should be available at most electronic stores.**

Cable Box

(Figure 3)

1. Connect the incoming cable to ANT-B on the TV back panel.

➡ Connect two coaxial cables as follows:

2. One from LOOP-OUT on the TV back panel to IN on the cable box back panel.
3. One from OUT on the cable box back panel to ANT-A on the TV back panel.

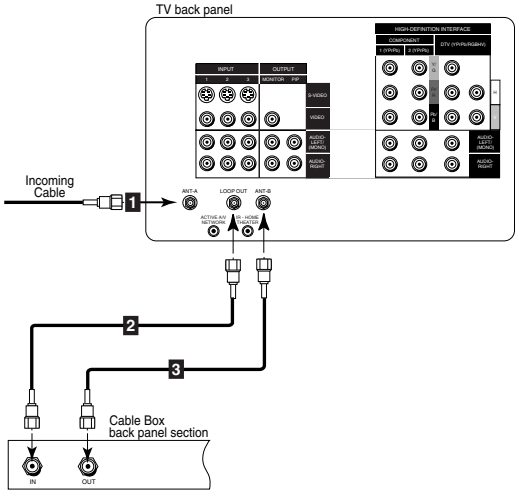


Figure 3. *Connecting the cable box.*

Connecting a VCR

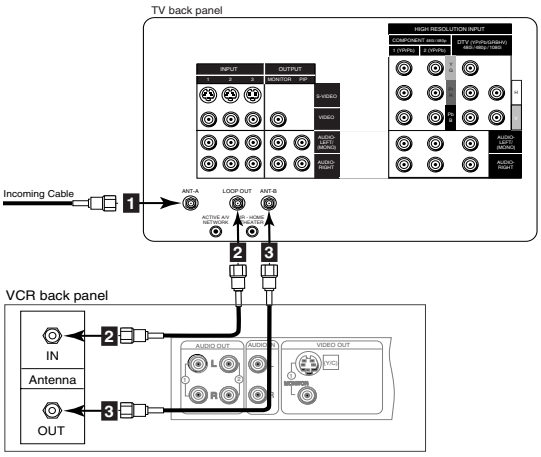


Figure 1. *Connecting VCR with antennas or wall outlet cable.*

IMPORTANT

➡ **Additional connection cables are not provided with the TV. They should be available at most electronic stores.**

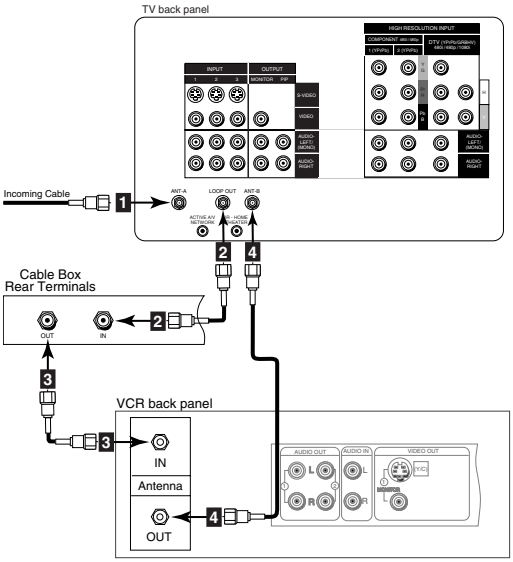


Figure 2. *Connecting VCR with cable box.*

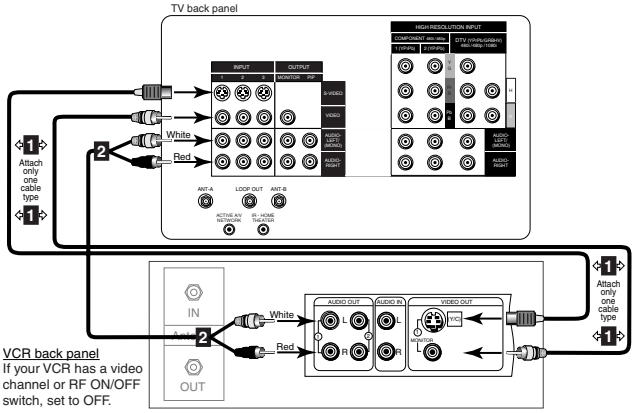


Figure 3. *Connecting the VCR Audio/Video.*

Antennas or Wall Outlet Cable

(Figure 1)

1 Connect the incoming cable to ANT-A on the TV back panel.

➡ Connect two coaxial cables as follows:

2 One from LOOP-OUT on the TV back panel to ANTENNA IN on the VCR back panel.

3 One from VCR back panel ANTENNA OUT to ANT-B on the TV back panel.

Cable Box

(Figure 2)

1 Connect the incoming cable to ANT-A on the TV back panel.

➡ Connect three coaxial cables as follows:

2 One from LOOP-OUT on the TV back panel to IN on the back of the cable box.

3 One from OUT on the back of the cable box to ANTENNA IN on the VCR back panel.

4 One from ANTENNA OUT on the VCR back panel to ANT-B on the TV back panel.

Composite Video with Audio or S-Video with Audio

(Figure 3)

1 Connect a video cable from VIDEO OUT on the VCR back panel to VIDEO INPUT-1 or INPUT-2 on the TV back panel.

➡ If you have a S-VHS VCR, follow the same steps using the S-Video terminals on the VCR and TV (in place of the composite terminals).

2 Connect a set of audio cables from AUDIO OUT on the VCR back panel to AUDIO INPUT-1, INPUT-2, or INPUT-3 on the TV back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel. If your VCR is mono (non-stereo), connect only the white (left) cable.

Connecting an Audio Receiver

Stereo Audio System

(Figure 1)

1. Connect the audio cables from AUDIO MONITOR OUTPUT on the TV back panel to TV IN or AUX IN terminals on the back of the audio system. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel.
2. Turn off the TV's speakers through the *A/V Connection Menu*, page 32.
3. Set the audio system's input to the TV or AUX position to hear the TV's audio through your stereo system.

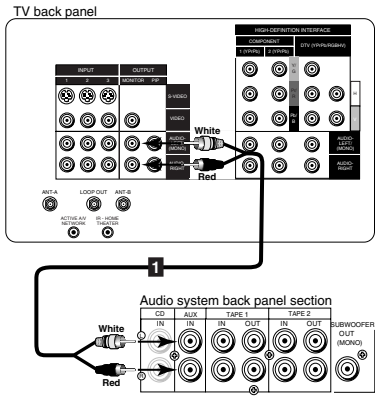


Figure 1. *Connecting the Stereo Audio System*

IMPORTANT

➡ **Additional connection cables are not provided with the TV. They should be available at most electronic stores.**

A/V Receiver

(Figure 2)

1. Connect a video cable or S-Video cable from VIDEO MONITOR OUT on the back of the A/V receiver to VIDEO INPUT-1 on the TV back panel.
2. Connect a video cable from VIDEO MONITOR OUTPUT on the TV back panel to VIDEO TV IN on the back of the A/V receiver.
3. Connect a set of audio cables from AUDIO MONITOR OUTPUT on the TV back panel to AUDIO TV IN on the back of the A/V receiver. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel.

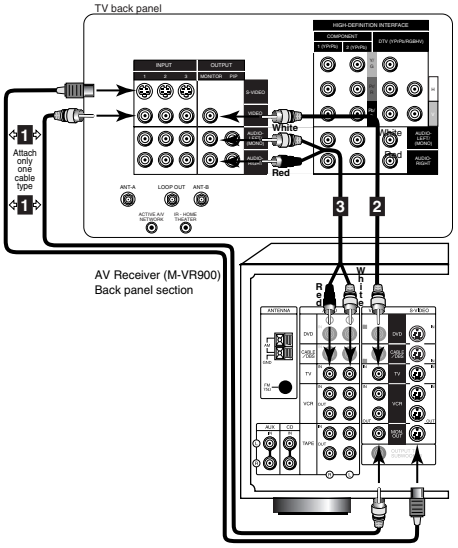


Figure 2. *Connecting the A/V Receiver.*

IMPORTANT

➡ **Please see your A/V receiver Owner's Guide for more detailed connections.**

WARNING: **Do not display the same stationary images on the screen for more that 15% of your total TV viewing in one week. Examples of stationary images are letterbox top/bottom bars from DVD or other video sources, side bars when showing standard TV pictures on widescreen TV's, stock market reports, video game patterns, station logos, web sites, or stationary computer images. Such patterns can unevenly age the picture tube causing permanent damage to the TV. Please see pages 23 and 62 for a detailed explanation.**

Connecting a DVD Player

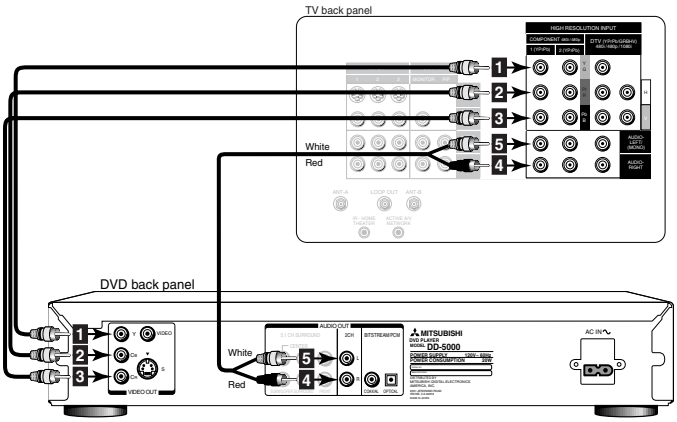


Figure 1. *Connecting the DVD player.*

IMPORTANT

- **See Appendix B, page 65, for component video signal compatibility information.**
- **For digital audio connections, see your DVD and A/V receiver Owner's Guides.**

DVD Player with Component Video

(Figure 1)

- Connect the Component Video cables from Y/Cr/Cb or Y/Pr/Pb VIDEO OUT on the back of the DVD player to COMPONENT-1 or COMPONENT-2 on the TV back panel, matching the correct components:
  - **1** Y to Y
  - **2** Cr or Pr to Pr
  - **3** Cb or Pb to Pb
- Connect a set of audio cables from AUDIO OUT on the back of the DVD player to COMPONENT AUDIO Input 1 or 2 on the TV back panel. The red cable **4** connects to the R (right) channel, and the white cable **5** connects to the L (left) channel.

Connecting a S-Video Device

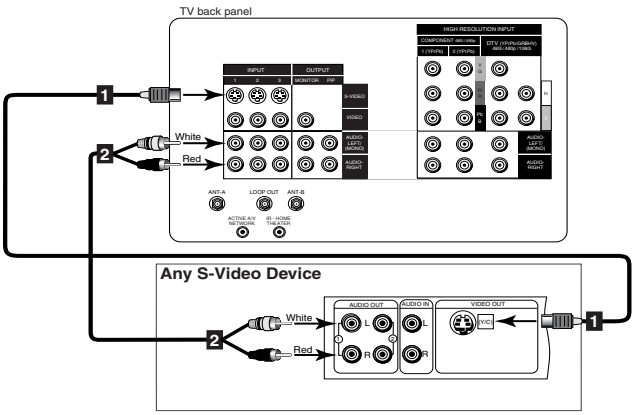


Figure 2. *Connecting any S-Video Device.*

Other S-Video Device

(Figure 2)

- **1** Connect a S-Video cable from VIDEO OUT on the device back panel to VIDEO INPUT-1, INPUT-2, or INPUT-3 on the TV back panel.
- **2** Connect a set of audio cables from AUDIO OUT on the device back panel to AUDIO INPUT-1 or INPUT-2 on the TV back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel. If your DVD is mono (non-stereo), connect only the white (left) cable.

Connecting a DTV Receiver

DTV Connections and Adaptors

(Figure 1)

The TV back panel has 5 RCA-type connectors, for the DTV connection. The back panel of your DTV receiver may use RCA-type connectors or BNC-type connectors. If your DTV receiver comes with BNC type connections, you will need to purchase BNC to RCA adaptors to connect the TV to the DTV receiver. These adaptors should be available at most electronic supply stores.

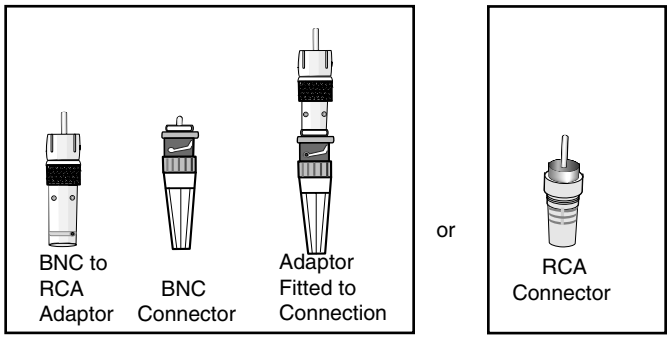


Figure 1. *DTV connectors and adaptors.*

DTV Receiver with Component Video Connections

(Figure 2)

1 Connect the outside antenna, cable, or satellite to ANT, or SATELLITE IN on the DTV receiver (see your DTV receiver's owner's guide for instructions, and cable compatibility).

2 Connect the incoming terrestrial antenna, or cable (not satellite) to ANT-A on the TV back panel (a coaxil splitter, available at most electronic supply stores, may be required to complete this installation).

3 Connect the RCA-type cables from the Y/Pr/Pb outputs on the DTV receiver to HIGH DEFINITION Y/Pr/Pb on the TV back panel. You must then set the DTV *Input Assignment*, page 31, to YPrPb.

4 Connect the L (left) and R (right) audio cables from the DTV receiver and to DTV AUDIO on the TV back panel.

➡ To utilize the benefits of a digital A/V receiver, connect your DTV receiver's digital audio out to a digital input on your digital A/V receiver.

IMPORTANT

➡ **See Appendix B, page 65, for component video signal compatibility information.**

➡ **For digital audio connections, see your DTV receiver and A/V receiver Owner's Guides.**

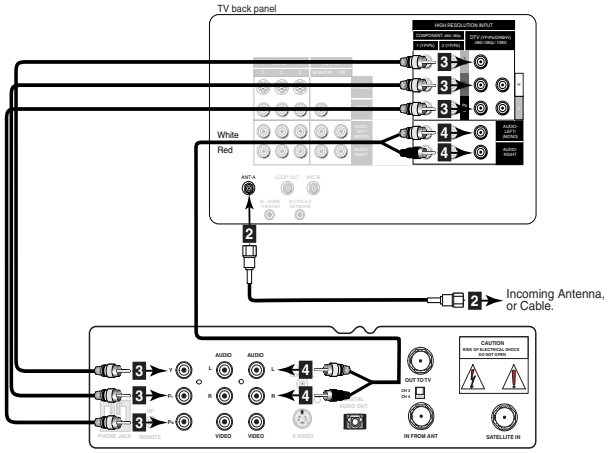


Figure 2. *Connecting the DTV receiver with component video connections.*

Connecting a DTV Receiver

IMPORTANT

- **See Appendix B, page 65, for RGB video signal compatibility information.**
- **For digital audio connections, see your DTV receiver and A/V receiver Owner's Guides.**

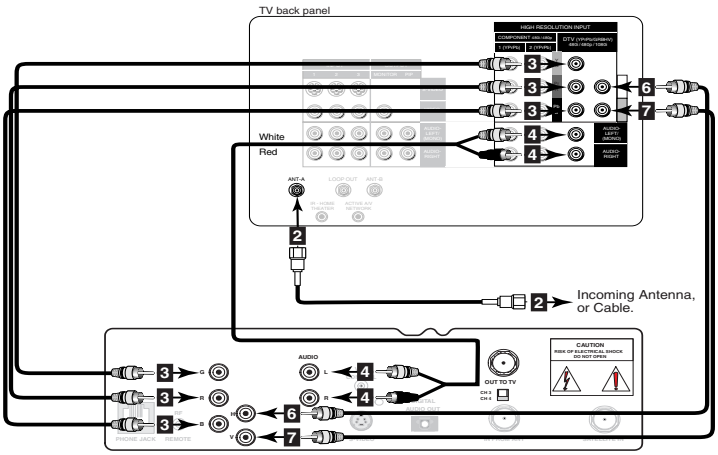


Figure 1. *Connecting the DTV receiver with RGB video connections.*

DTV Receiver with RGB Video Connections

(Figure 2)

1 Connect the outside antenna, cable, or satellite to ANT, or SATELLITE IN on the DTV receiver (see your DTV receiver's owner's guide for instructions, and cable compatibility).

2 Connect the incoming terrestrial antenna, or cable (not satellite) to ANT-A on the TV back panel (a coaxil splitter, available at most electronic supply stores, may be required to complete this installation).

➡ Connect the RGB cables from the DTV receiver to the TV back panel as listed below (if your DTV receiver uses BNC-type cables, use the adaptors shown in figure 1, page 20):

	DTV Receiver		TV Back Panel
3	G (green)	=	Y
4	R (red)	=	Pr
5	B (blue)	=	Pb

➡ If the DTV receiver has outputs for H and V sync, connect as listed below (**DO NOT** connect if DTV receiver uses "Sync on Green"):

6	H (horizontal sync)	=	H
7	V (vertical sync)	=	V

8 Connect the L (left) and R (right) audio cables from the DTV receiver and to DTV AUDIO on the TV back panel.

➡ To utilize the benefits of a digital A/V receiver, connect your DTV receiver's digital audio out to a digital input on your digital A/V receiver.

Connecting the Active A/V Network

(Figure 1)

The Active A/V Network is a special feature that makes it easier to use your TV and Mitsubishi VCR equiped with Active A/V Network. This feature will automate common TV-to-VCR functions. For Mitsubishi VCRs having an A/V Network, but not an Active A/V Network, this connection will pass the remote control commands to your hidden VCR.

1. Connect the Active A/V Network cable from ACTIVE A/V NETWORK on the TV back panel to ACTIVE A/V NETWORK IN, or A/V NETWORK IN on the back of your Mitsubishi VCR.
2. Turn the Active A/V Network on through the *A/V Connection Menu*, page 32.

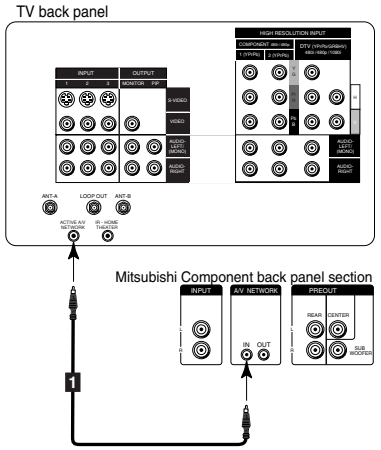


Figure 1. *Connecting the Active A/V Network.*

IMPORTANT

➡ **Check your added Mitsubishi component's Owner's Guide to ensure the best possible connection.**

Connecting the Home Theater IR System

(Figure 2)

1. Connect the IR emitter to IR HOME THEATER on the TV back panel.
2. Place the IR emitter cable under or along the side of the A/V receiver. Place the IR lens directly in front of the A/V receiver's infrared signal receiver. Infrared signal receivers are usually behind the front translucent panel of the receiver.
3. Place the unused transmitter in an out-of-the-way location.
4. For permanent installation of the IR emitter cable, use the included adhesive tape to secure the bottom of the emitter to the anchoring object of your choice.

IMPORTANT

➡ **See page 57 for details on using the TV's IR emitter to control a Mitsubishi A/V receiver.**

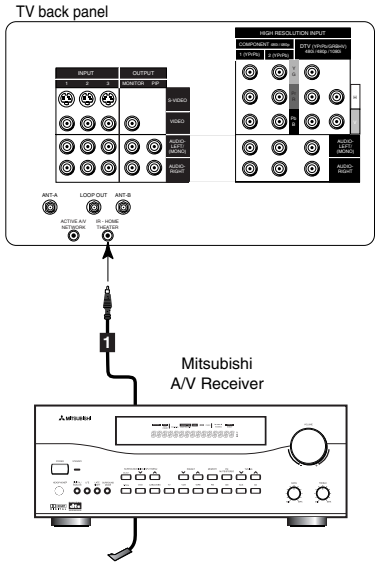


Figure 2. *Connecting the Home Theater IR System.*

Warning: Do not leave stationary or letterbox images on-screen for extended periods of time. Mix the types of pictures shown. Uneven picture tube aging is NOT covered by your warranty.

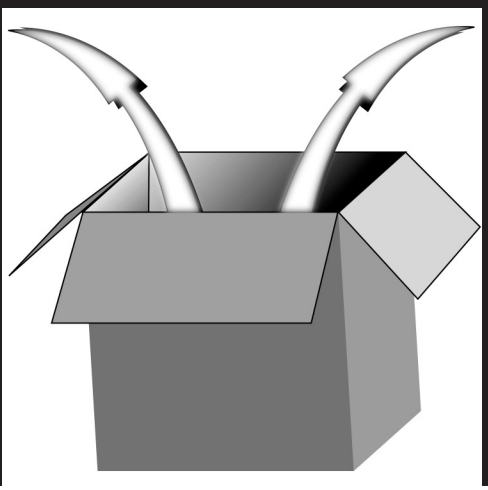
The normal use of a TV should include a mixture of TV picture types. The most frequently used picture types should fill the screen with constantly moving images rather than stationary images or patterns. Displaying the same stationary patterns over extended periods of time, or displaying the same stationary pattern frequently can leave a subtle but permanent ghost image. To avoid this, mix your viewing pattern. Do not show the same stationary image for more than 15% of your total TV viewing in any one week. Display constantly moving and changing images that fill the screen whenever possible.

This projection TV uses picture tubes to project the image to the screen. **All picture tubes age with use.** As they age, their light output is gradually reduced. Normal TV pictures fill the screen with constantly changing images. Under these conditions, picture tubes age at an even rate across the entire screen. This maintains a TV picture that is evenly bright over the whole screen. Stationary images or images that only partially fill the screen (leaving black or colored bars to fill the screen), when used over extended periods of time or when viewed repeatedly, can cause uneven aging of the phosphors and leave subtle ghosts of the stationary images in the picture

Still or stationary images may be received from broadcasters, cable channels, satellite channels, DVD discs, video tapes, laser discs, on-line services, web/internet searching devices, video games, and digital TV tuner/converter boxes. Examples of these types of images can be, but are not limited to the following:

- **Letterbox top/bottom black bars**: shown at the top and bottom of the TV screen when you watch a widescreen (16:9) movie on a standard (4:3) TV.
- **Side bar images**: solid bars shown on each side of an image when watching a standard (4:3) program on a widescreen (16:9) TV.
- **Stock-market report bars**: ticker running at the bottom of the TV screen.
- **Shopping channel logos & pricing displays**: bright graphics that are shown constantly or repeatedly in the same location.
- **Video game patterns and scoreboards**
- **Bright station logos**: moving or low-contrast graphics are less likely to cause uneven aging of the picture tubes.
- **On-line (internet) web sites**: or any other stationary or repetitive computer style images.

Part III



Setup

Use of the Remote Control with Other A/V Products 26-27

ViewPoint® on-screen menu system 28

Using ViewPoint® 28

Menu Screens (Overview)... 29-30

Setup Menu.....31

Memorize Channels 31

Input Assingment.....31

A/V Connection.....32

Language.....34

Clock Setting.....35

Captions Menu 37

Channel Edit Menu.....39

V-Chip Parental Lock.....42

Advanced Features Menu.....45

Timer 45-46

Convergence 47

Audio Video Settings Menu....49

Use of the Remote Control with Other A/V Products

To Program the Remote to Control Other Brands of Audio and Video Products:

(Figures 1-5)

1. Move the slide switch at the top of the remote to the product you want to control.
2. Press and hold the POWER button on the remote control.
3. Enter the first three digit code listed for your equipment, and then release the POWER button on the remote control.
4. Point the remote control at the equipment and press the POWER button. If the equipment responds, the remote control is properly programmed to operate the equipment. If the equipment does not respond, repeat steps 2-4 with the next three digit code listed in step 3 for your equipment.

3 Cable Box Codes

Cable box brand	Code to enter:
General Instruments/ Jerrold	111, 119, 120, 121, 122, 123, 124, 125, 126, 127
Oak	102, 137, 139
Pioneer	101, 116
Scientific Atlanta	111, 112, 113
Zenith	100, 117
To reset to default code, enter 000	

If your cable box code is not listed here, please see page 66 for a complete listing.

Figure 1. *Programming the remote to control your cable box.*

IMPORTANT

➡ **If you cannot turn the cable box ON by pressing POWER, try pressing CHANNEL or the number buttons.**

3 Satellite Receiver Codes

Satellite brand	Code to enter:
Mitsubishi DTV - DBS	006
Dishnetwork	175
Hughes - DBS	173
RCA - DBS	176
Sony - DBS	177
Toshiba - DBS	170
Panasonic - DBS	174
Primestar	178
To reset to default code, enter 000	

If your satellite receiver code is not listed here, please see page 66 for a complete listing.

Figure 2. *Programming the remote to control your satellite receiver.*

3 VCR Codes

VCR brand	Code to enter:
Mitsubishi	001, 002
Hitachi	020, 043, 065
JVC	030, 054, 059
Phillips / Magnivox	043, 044, 051
Panasonic	041, 042, 043
RCA	020, 053, 065
Sony	048, 049, 050
Toshiba	021, 066
To reset to default code, enter 000	

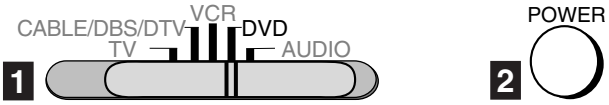
If your VCR code is not listed here, please see page 66 for a complete listing.

Figure 3. *Programming the remote to control your VCR.*

IMPORTANT

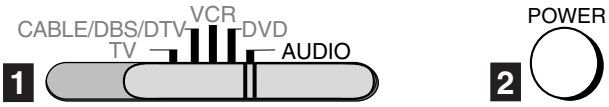
➡ **When set to TV, the PLAY, STOP, REW/REV, and FF/FWD buttons will operate the VCR after the VCR codes have been properly Programmed into the remote control.**

Use of the Remote Control with Other A/V Products



3 DVD/LDP Player Codes		
DVD/LDP brand	**Code to enter:**	If your DVD code is not listed here, please see page 66 for a complete listing.
Mitsubishi (DVD)	003	
Mitsubishi (LDP)	016, 017	
Panasonic	250	
Pioneer DVD (LDP)	252 (016, 017)	
Sony	254	
Toshiba	253	
To reset to default code, enter 000		

Figure 4. *Programming the remote to control your DVD/ LDP.*



3 A/V Receiver Codes		
Audio brand	**Code to enter:**	If your audio code is not listed here, please see page 66 for a complete listing.
Mitsubishi A/V receiver and/or CD player	010, 011	
Kenwood	200, 208	
Onkyo	209, 214	
Pioneer	205, 207	
Sony	222	
Yamaha	201, 208	
To reset to default code, enter 000		

Figure 5. *Programming the remote to control your A/V receiver.*

IMPORTANT

- **If the slide switch is set to TV when you enter an A/V receiver code, VOLUME and MUTE will control the A/V receiver rather than the TV. To return volume and mute control to the TV, set the slide switch to TV, press and hold POWER and enter 000.**

IMPORTANT

- **Some manufacturers may change their products, or they may use more than one remote control system. If this is the case, your remote control may not be able to operate your VCR, DVD, cable box, satellite receiver, or A/V receiver.**

After entering the correct codes in each position of the remote control, use the slide switch to select which product will respond when an operational button is pressed. If you enter a code frome the AUDIO chart while the slide switch is set to TV, the volume and mute functions change to match the A/V receiver. This is useful when using an A/V receiver with the TV all the time. Only one device is allowed for each slide switch position, however, selected

TV position:
- TV
- A/V receiver (volume and mute only)

Cable/DBS/DTV position:
- Cable box
- Satellite receiver
- DTV receiver

VCR position:
- VCR

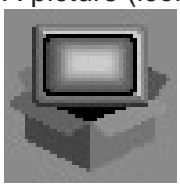
DVD position:
- DVD
- VCR
- LD Player

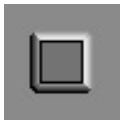
Audio position:
- A/V receiver
- Mitsubishi CD player (If you have a Mitsubishi A/V receiver, the audio position may be used in conjunction with select Mitsubishi CD players. Your audio position must be programmed to either 010 or 011. Plug the CD player power cord into a switched outlet on the back of your A/V receiver. Pressing the POWER button will then turn on your A/V receiver, in turn, turning on your CD player. On select CD players, the transport controls (FF, Play, Rew, etc.) in the audio position will operate the CD player.)

The ViewPoint® Menu System

Your TV has Mitsubishi's exclusive ViewPoint® on-screen operating system, which provides on-screen information for menu choices and changes (Figure 1).

A picture (icon) will be highlighted when selected with the ADJUST arrows. The (icon) indicates that a submenu option can be displayed or an automatic function can be started. Press the ENTER button to display the options or start the function.





A square button indicates that you make changes to this menu choice on this menu screen.

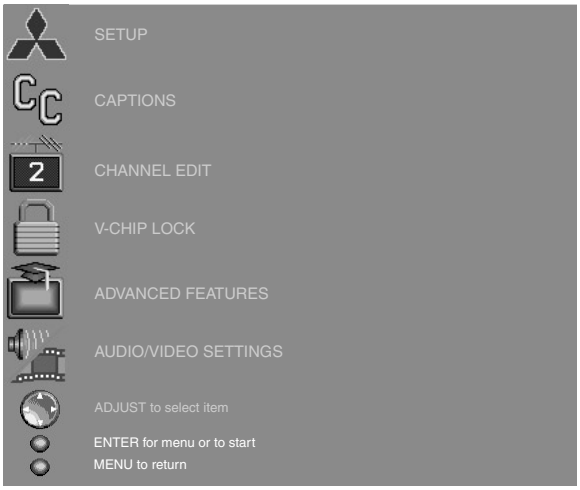


Figure 1. *MAIN Menu: The MAIN menu screen will always be the first screen that appears when you press the MENU button.*

The ViewPoint® system includes the following special features:

- The currently selected icon or button is highlighted with a yellow outline and the text color will be yellow.
- On-screen instructions provide complete menu choice information.
- Some on-screen menu options must be set before other options are available. For example, *"Set the Timer"* will only be possible if *"Clock Time"* and *"Set Day"* have been set.

The following buttons on your remote control will help you to navigate within the ViewPoint® system (Figure 2):

1. ADJUST ▲ or ▼ to select the menu item you want to change.
2. ADJUST ▶ to move to the setting field.
3. ADJUST ▲ or ▼ to change the settings.
4. ADJUST ◀ to move back to the menu item.
5. ENTER to select an option, or start an automatic function.
6. CANCEL to clear a setting, or stop an automatic function.
7. MENU to move back one menu screen at a time.
8. HOME to exit all menus and return to TV viewing.

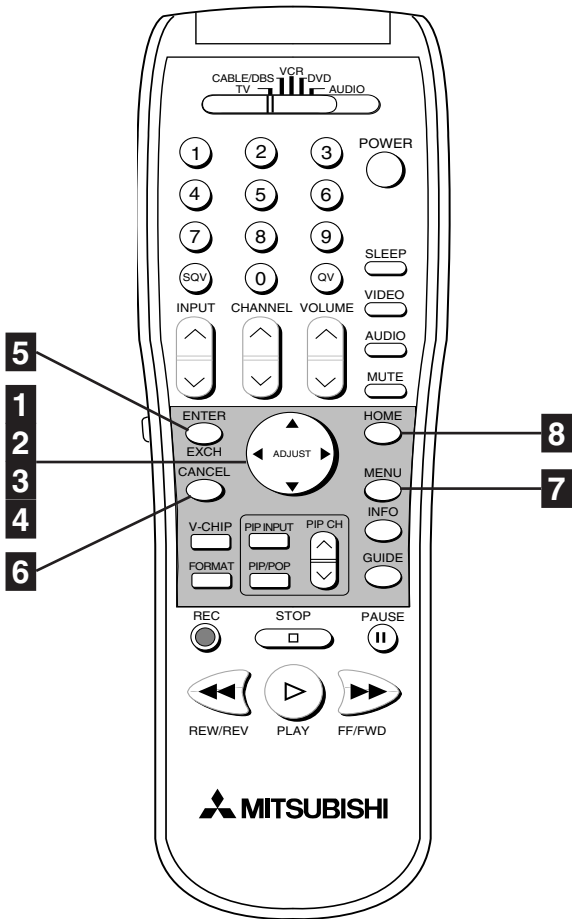


Figure 2. *These buttons are used for navigation within the ViewPoint® on-screen operating system.*

Menu Screens (Overview)

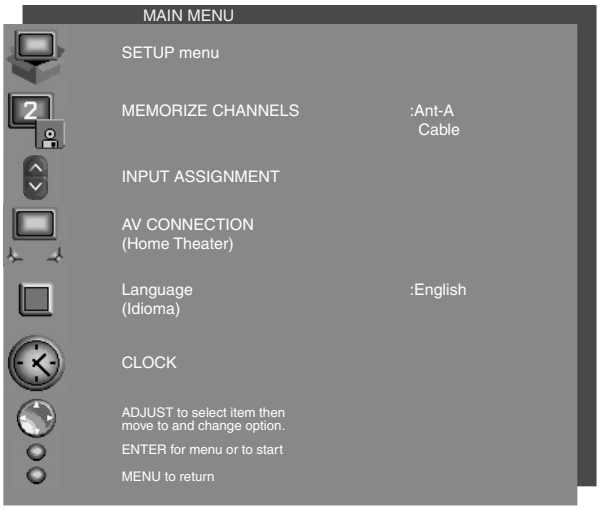


Figure 1. *SETUP Menu*

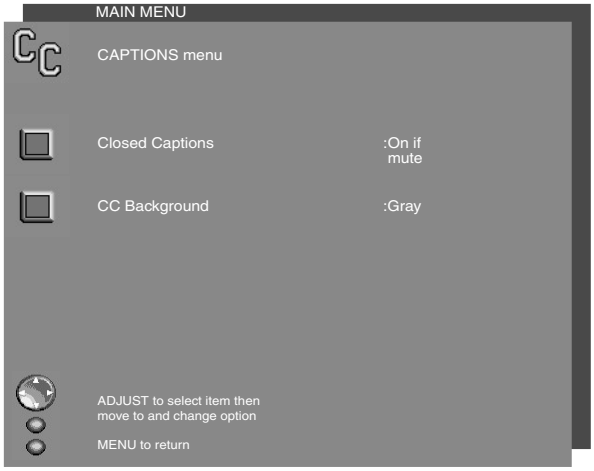


Figure 2. *CAPTIONS Menu*

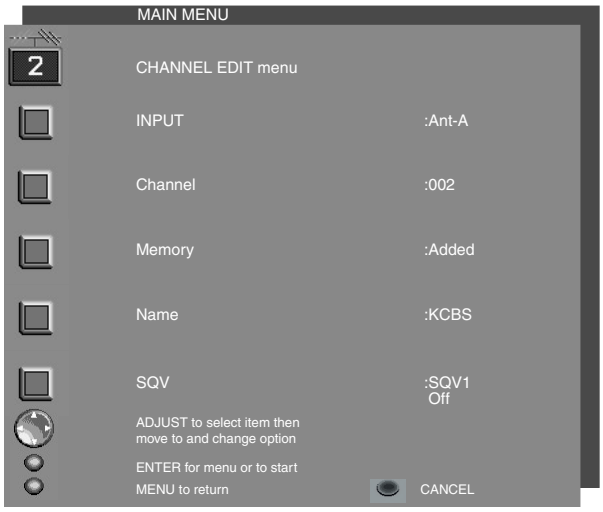


Figure 3. *CHANNEL EDIT Menu*

SETUP Menu

(Figure 1)

Basic setup instructions and functions are available through the SETUP menu screens. You can put channels in memory, set the time and day, set your TV to be part of a home theater setup, view the menus in English or Spanish, and turn on or off inputs connected to the TV.

CAPTIONS Menu

(Figure 2)

Display captions or text, and choose black or gray as the background color for the closed caption area.

CHANNEL EDIT Menu

(Figure 3)

Use to customize the channel information for Ant-A and Ant-B. Manually add or delete channels from memory, name channels for Ant-A and Ant-B, or add your favorite channels to a SQV (Super Quick View™) list.

Menu Screens (Overview)

V-CHIP LOCK Menu

(Figure 1)

Block or allow programing based upon rating signals sent by the broadcast station, or by time.

Figure 1. *V-CHIP LOCK Menu*

ADVANCED FEATURES Menu

(Figure 2)

Set your TV to turn on automatically, converge (align) the three main colors, display a blue screen when viewing an input with no signal, enhance the darker parts of bright pictures, and change the line doubling method.

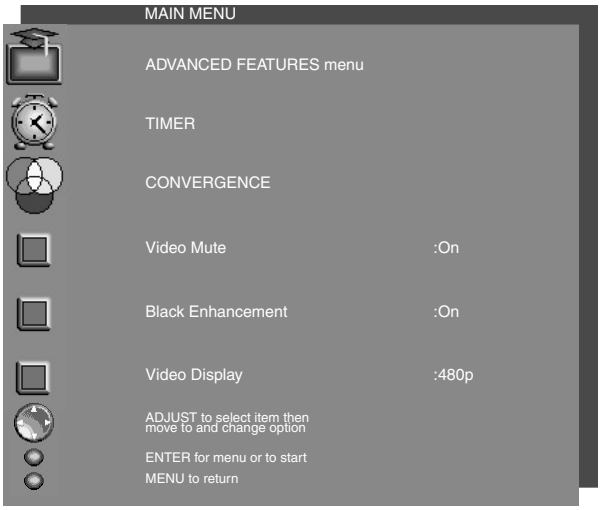


Figure 2. *ADVANCED FEATURES Menu*

AUDIO/VIDEO SETTINGS Menu

(Figure 3)

Adjust some or all of the A/V settings. Each input can be set to your preferences. A/V Reset on the menu allows you to return the A/V settings for the current input to the factory presets. A/V Reset on the front panel resets all inputs at one time.

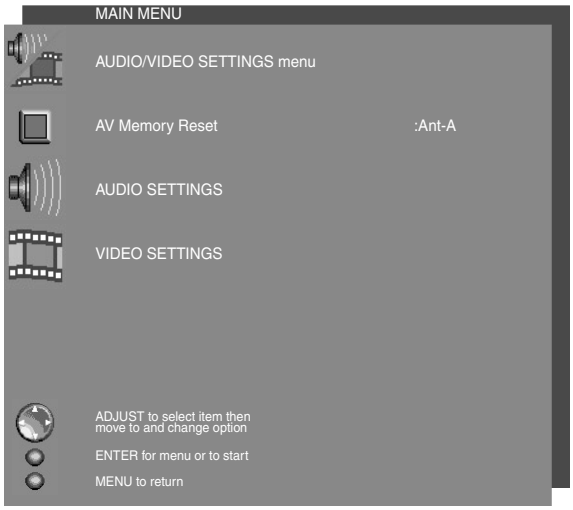

MAIN MENU
AUDIO/VIDEO SETTINGS menu
AV Memory Reset :Ant-A
AUDIO SETTINGS
VIDEO SETTINGS
ADJUST to select item then move to and change option
ENTER for menu or to start
MENU to return

Figure 3. *AUDIO/VIDEO SETTINGS Menu*

SETUP Menu: MEMORIZE CHANNELS

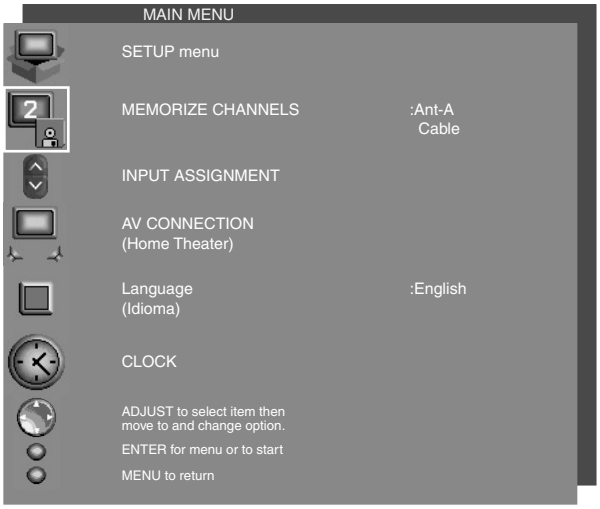


Figure 1. *MEMORIZE CHANNELS*

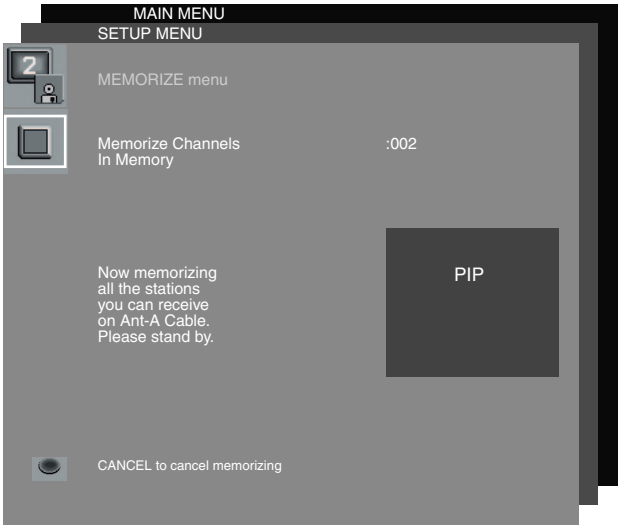


Figure 2. *MEMORIZE Menu*

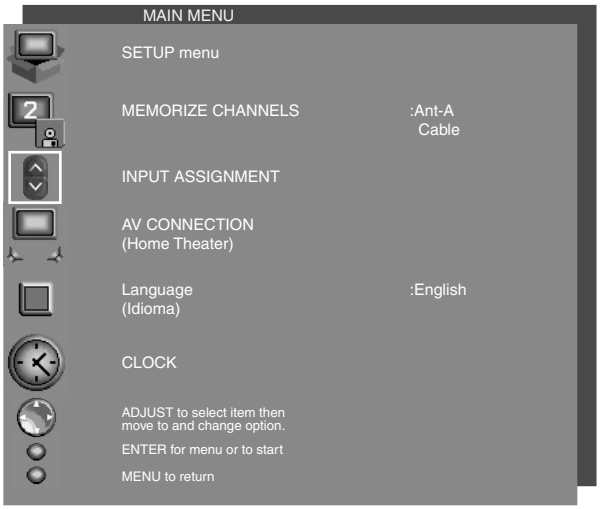


Figure 3. *ASSIGN INPUT Menu*

MEMORIZE CHANNELS

(Figure 1)

This selection memorizes the channels your TV can receive and skips the unused or weak channels.

IMPORTANT

➡ **DTV Note: If you have a DTV receiver connected, you will need to use that receiver's channel memorization system to memorize digital channels.**

MEMORIZE Menu

(Figure 2)

You can stop memorization at any time by pressing CANCEL. Channels memorized prior to pressing CANCEL will stay in memory. After channels are memorized, you may select memorized channels in ascending or descending order by pressing the CHANNEL button on the remote control.

INPUT ASSIGNMENT Menu

(Figure 3)

ASSIGN INPUT turns off unused inputs, turns them on again, or changes the name of the input. If you turn an input Off, it will be skipped when you press the INPUT button on the remote control. Input choices are:

- Ant-A, or Ant-B: On or Off.
- DTV: YPrPb, RGB, or Off.
- INPUT-1, INPUT-2, INPUT-3, or INPUT-4: Cycle through a list of preset names, or Off.
- COMPONENT-1 or COMPONENT-2: Cycle through a list of preset names, or Off.

SETUP Menu: A/V Connection (Home Theater)

A/V Connection Menu

(Figure 1)

The A/V CONNECTION menu allows you to customize the way your TV works with other A/V components, for a complete home theater experience. You can adjust:

1. A/V Network: Active or Off
2. TV Speakers: On or Off
3. A/V Receiver: None, Mits A, Mits B, or Other
4. Audio Output: Variable or Fixed

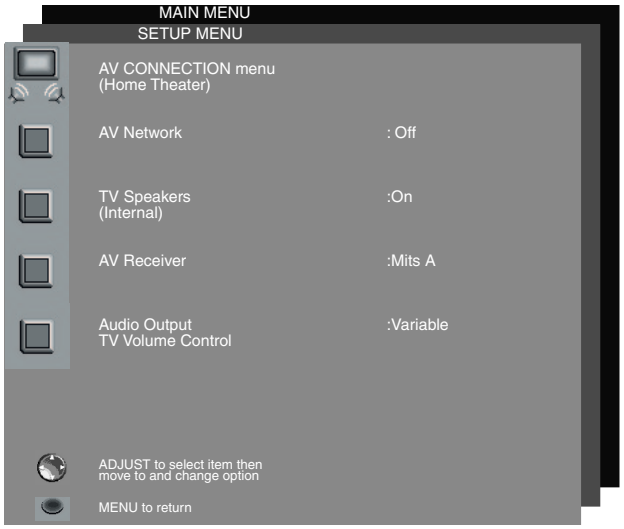


Figure 1. *A/V Connection Menu*

IMPORTANT

➡ **If you are not using the A/V Network System, set it to Off so that channel selection works correctly.**

A/V Network

(Figure 2)

Set to Active if you are using a Mitsubishi VCR with an Active A/V Network terminal and have the A/V Network cable connected. This will simplify several common TV/VCR operations to just a few presses of the remote control buttons. If A/V Network is set to Off, the A/V Network will still transfer Mitsubishi VCR remote control signals to a Mitsubishi VCR that has an Active A/V Network cable connected. This is useful if the VCR is placed inside a cabinet that blocks the direct signal from the remote control. For more information on the Active A/V Network see *Connecting the Active A/V Network*, page 22, and *Remote Control Functions: Active A/V Network*, pages 56-57.

Figure 2. *A/V Network*

SETUP Menu: TV Speakers and A/V Receiver

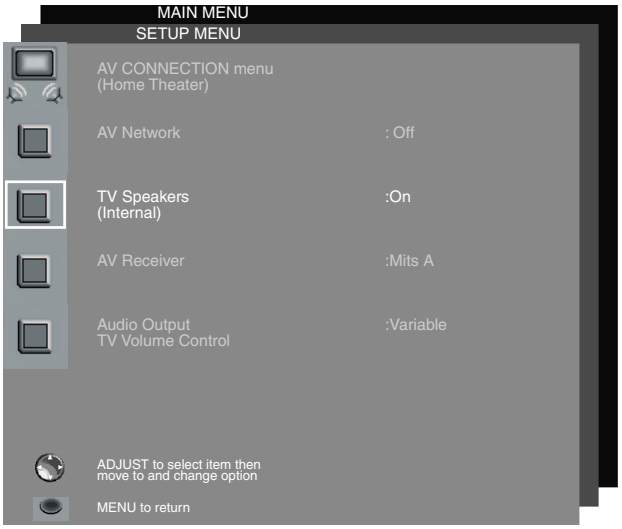


Figure 1. *TV Speakers*

TV Speakers

(Figure 1)

This selection will turn on or off the TV's internal speakers. You may select Off when sending the sound through a separate stereo system or surround sound A/V receiver.

IMPORTANT

➡ **To prevent damage from a sudden increase in volume, make sure the TV volume is low before choosing ON.**

A/V Receiver

(Figure 2)

Whether or not you have connected the monitor video output of an A/V receiver to the TV's INPUT-1 video input, you will need to set A/V Receiver correctly to one of the following:

- None: When you have not connected an A/V receiver monitor video output to the TV's INPUT-1 video input.
- Mits-A: When you have connected a Mitsubishi digital A/V receiver (digital surround sound) model M-VR800 or M-VR1000. This also activates the Home Theater IR System. See *Remote Control Functions: Home Theater IR System*, page 57, for operating information.
- Mits-B: When you have connected a Mitsubishi digital A/V receiver (digital surround sound) model M-VR700, M-VR900, or other model introduced in 1999 or later. This also activates the Home Theater IR System. See *Remote Control Functions: Home Theater IR System*, page 57, for operating information.
- Other: When you have connected any other Mitsubishi A/V receiver or another brand of A/V receiver. This also blocks signal output from the TV Monitor output when the TV is set to INPUT-1.

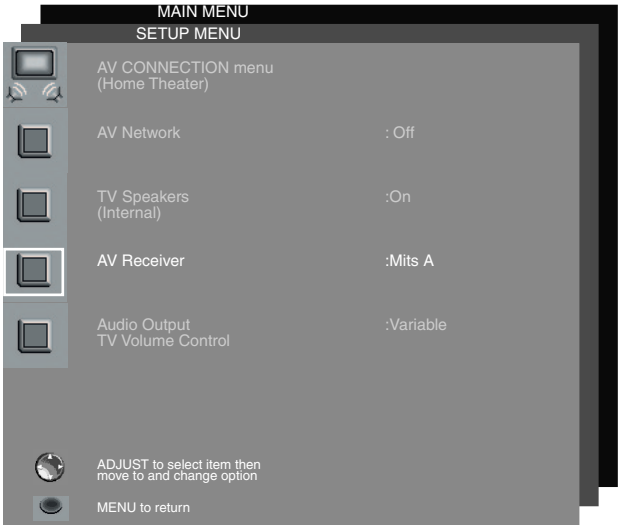


Figure 2. *A/V Receiver*

SETUP Menu: Audio Output, and Language

Audio Output
(Figure 1)

Select Fixed if your audio receiver or stereo system can be controled with a remote. This allows you to adjust the volume with the system's remote control or the TV remote control, if compatible. This setting is better for surround sound receivers. Select Variable if your audio receiver or stereo system cannot be controled with a remote. This allows the TV's internal circutry to adjust the volume.

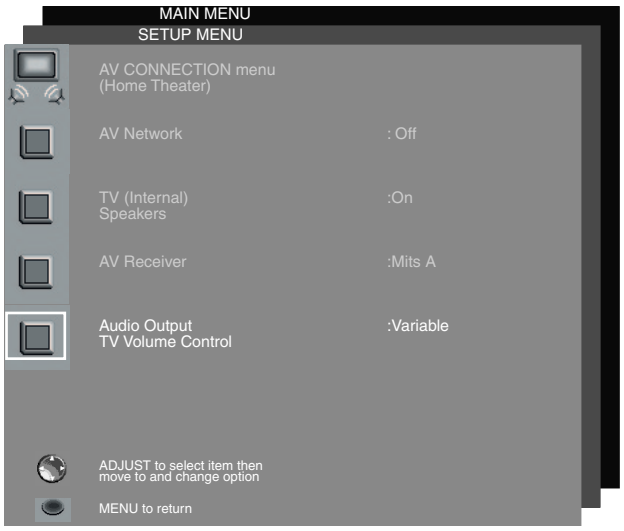


Figure 1. *Audio Output*

Language
(Figure 2)

Display the on-screen menus in either English or Spanish (Español). The first time your TV was powered on, you were requested to select an on-screen menu language.

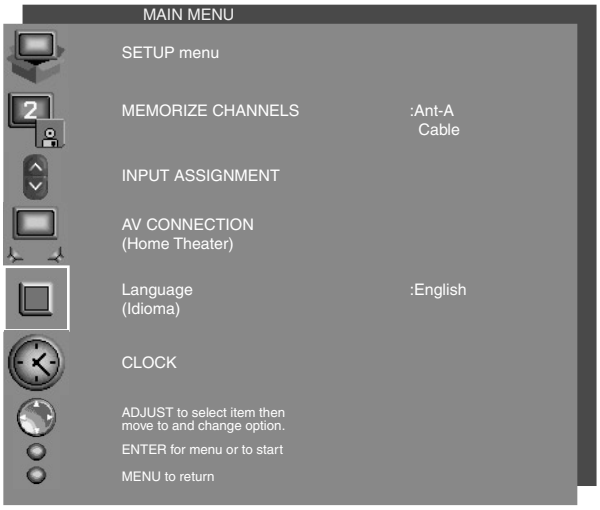


Figure 2. *Language*

SETUP Menu: Clock Setting (Auto)

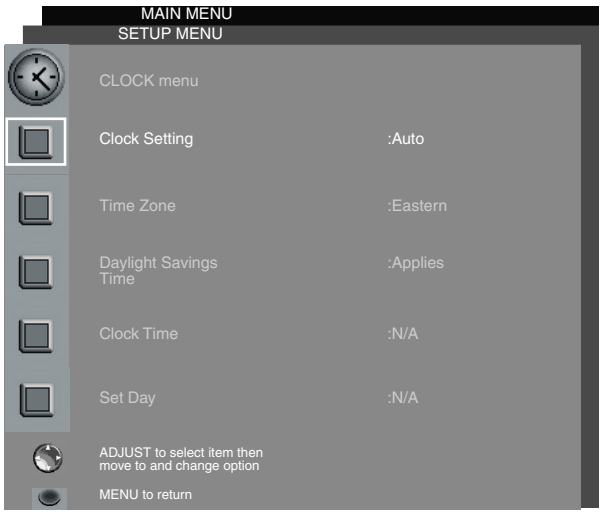


Figure 1. *Clock Setting (Auto)*

Clock Setting (Auto)

(Figure 1)

Setting the Clock Setting to Auto will automatically set the day and time using Extended Data Service (XDS) time data. This data is automatically retrieved from a PBS channel or other channel carrying this service.

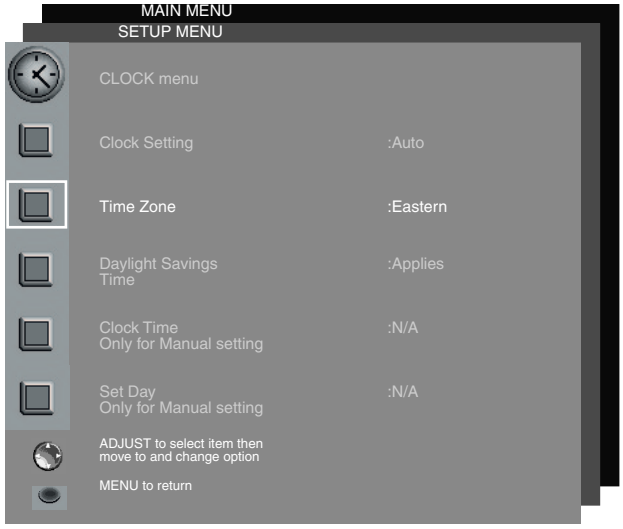

MAIN MENU
SETUP MENU
CLOCK menu
Clock Setting :Auto
Time Zone :Eastern
Daylight Savings Time :Applies
Clock Time Only for Manual setting :N/A
Set Day Only for Manual setting :N/A
ADJUST to select item then move to and change option
MENU to return

Figure 2. *Time Zone*

Time Zone

(Figure 2)

When Auto has been selected for the Clock Setting, you need to select the correct time zone (Atlantic, Eastern, Central, Mountain, Pacific, Alaska, or Hawaii) for your area.

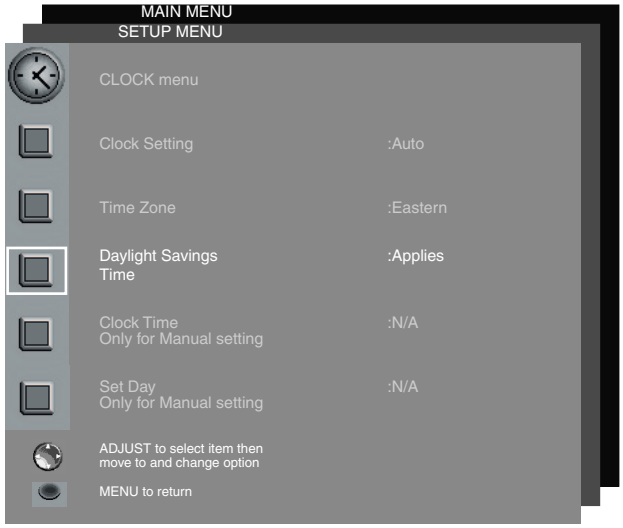

MAIN MENU
SETUP MENU
CLOCK menu
Clock Setting :Auto
Time Zone :Eastern
Daylight Savings Time :Applies
Clock Time Only for Manual setting :N/A
Set Day Only for Manual setting :N/A
ADJUST to select item then move to and change option
MENU to return

Figure 3. *Daylight Savings Time*

Daylight Savings Time

(Figure 3)

When Auto has been selected for the Clock Setting, you need to select the Daylight Savings Time (DST) option that your state uses (Applies = uses DST, or Ignore = does not use DST).

The clock time and day will be set automatically after tuning to a channel carrying the Extended Data Service (XDS) time data.

SETUP Menu: Clock Setting (Manual)

Clock Time
(Figure 1)

For the manual clock setting, select the current time, including AM or PM.

Press ▲ or ▼ to slowly adjust the time. Press and hold ▲ or ▼ to quickly adjust the time.

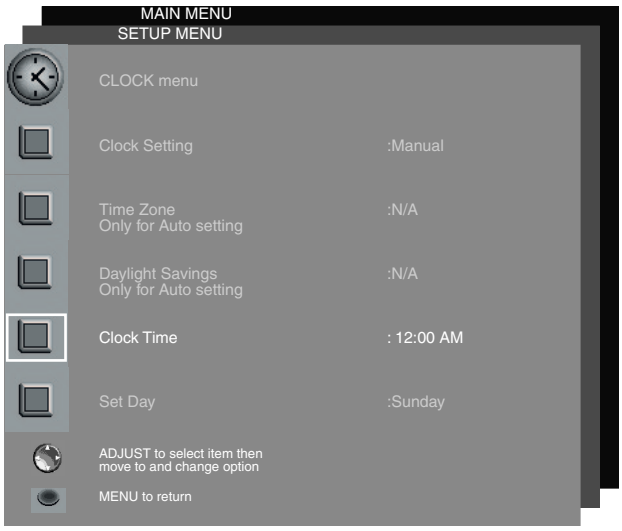


Figure 1. *Clock Time*

Set Day
(Figure 2)

When Manual has been selected for the Clock Setting, you need to select the current day of the week.

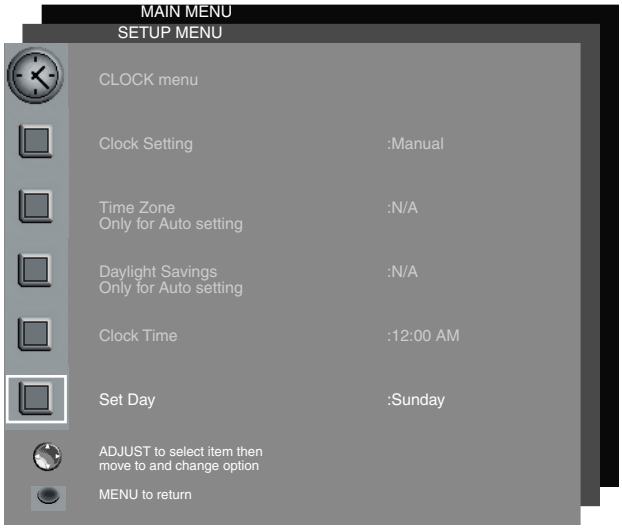


Figure 2. *Set Day*